

**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
INSTRUCTIONS AND GUIDE TO WASTEWATER MANAGEMENT PLAN
FORMAT AND CONTENT (Instructions)**

Requests for Water Quality Management plan amendments must be in writing. The Wastewater Management Plan Application Completeness Checklist must be completed along with the Application Form, the Wastewater Management Plan (WMP) document and Environmental Assessment and Analysis document. The WMP document should be submitted in a three ring binder format. The text of a wastewater management plan must be submitted in a hard paper copy however, the Department requests that the WMP document be submitted in an electronic format that is compatible with the Department's software capabilities on 3 ½ inch diskettes or compact disk as well. Submission of an electronic version or diskette is not a requirement. The Department prefers Microsoft Word 6.0 or above; however, other word processing software that can also be read or used by Microsoft Word 6.0 is acceptable. Macintosh formats should not be used. The Department will identify the quantity of hard copies to be submitted and the software and format for the electronic submittal at the optional pre-application meeting or over the telephone.

It should be noted that the WMP requirements specified in this document are in summary form, and are based on the requirements of the Statewide Water Quality Management Planning rules (N.J.A.C. 7:15). In cases of conflict or contradiction, the Statewide Water Quality Management Planning rules take precedence.

Superfluous information should not be included in the WMP. It will be required that such material be deleted, resulting in delay of WMP approval.

The Department or the Designated Water Quality Management Planning Agency (DPA) may request additional information, analyses or assessments at any time during the Wastewater Management Plan review process.

1. If the project or activity proposal or any applicable study areas fall within the jurisdiction of a DPA that processes Water Quality Management plan amendments pursuant to approved Plan Amendment Procedures, contact the appropriate agency to determine if they have any additional submission requirements (see the WMP/WMP Update Application Form for a list of such agencies and contact information). Submit the application for a Wastewater Management Plan concurrently to the Department and the DPA or as directed by the applicable DPA procedures. The Department is not responsible for transmitting Wastewater Management Plan amendment requests to the DPA's.

2. Attach a completed copy of the Water Quality Management Plan WMP/WMP Update Application Form. Directions for completing this form are contained within the Application form package (see the Division website at <http://www.nj.gov/dep/watershedmgt/rules.htm>).

3. Under N.J.A.C. 7:15-5.22, it is mandated that during preparation of a WMP every wastewater management planning agency shall, notify, seek comments from, and offer to confer with all governmental units that have regulatory or planning jurisdiction over wastewater or land use in the WMP area. Proof of such notification is required. All applicants should keep a record of notification and any comments received and provide this information to the Department as part of this application. The Department does not expect, nor does it want resolutions of support or statements of consent at this point in the process, merely proof that notification and consultation has occurred. The Department will discuss who the affected governmental agencies are with the applicant at the pre-application meeting, if desired, and will provide a list of these agencies to the applicant as part of the follow-up letter outlining requirements after the meeting. The applicant

should identify on the completeness checklist, how many entities they contacted to meet this requirement.

4. Under N.J.A.C. 7:15-5.3(c), wastewater management plans shall be prepared, submitted, and periodically updated only by the wastewater management planning agencies for the corresponding wastewater management plan areas. For a list of wastewater management planning agencies and contact information see the Division website at <http://www.nj.gov/dep/watershedmgt/rules.htm>. The enclosed form entitled "Wastewater Management Plan Certification" must be completed and signed by an authorized agent of the Wastewater Management Planning agency to ensure that any Wastewater Management Plan submittals being made are on behalf of the wastewater management planning agency.

5. A complete new Wastewater Management Plan document includes all of the information on the following pages at a scale appropriate for the size of the wastewater management planning or study areas.

6. Submit a complete copy of all required environmental analyses and assessments performed or in support of the proposed wastewater management plan as determined at the Pre-Application meeting. This information should be submitted as a separate document and not as a part of the wastewater management plan. Only the summary of results and strategies to address the findings of the environmental assessments/analyses should appear in the wastewater management plan text.

7. The quantity of hard copies to be submitted and the software and format for the possible electronic submittal discussed at the optional pre-application meeting or over the telephone should be attached. Indicate on the line provided the actual number of Wastewater Management Plan documents that are being provided.

Once the Department has completed its review of the above application, a written decision will be issued to either disapprove the request, asking for additional information or other necessary changes, or decide to proceed further with the amendment.

WQMP Amendments

1. If the Department decides to proceed with the amendment, a written notice will be issued that includes a copy of a public notice for the proposed amendment to be published by the applicant in a specified newspaper. The Department will arrange for publication of this same notice in the New Jersey Register. In its letter, the Department will also provide a list of parties that must be asked to consent to the amendment. Statements of consent must be in the form of a formal resolution. The Department will provide the applicant with a model statement of consent. Additional requirements may also need to be supplied to correspond with specific DPA amendment procedure requirements.

2. Within 15 days of receiving the Department's notice, the applicant must send by certified mail (return receipt requested) a copy of the proposed amendment to the parties identified by the Department, with a request that they consent to the proposed amendment within 60 days.

3. All statements of consent and comments received by the applicant must be promptly forwarded to the Department. If a party does not respond to a statement of consent request within 60 days, or refuses to consent to the proposed amendment; the Department will take into consideration the reasons for such action or inaction, if known.

4. Once the public notice for the proposed amendment is published, there will be a 30-day public comment period. During this time anyone may submit written comments on the proposed amendment, request an extension of the public comment period for an additional 30 days, or request that the Department hold a non-adversarial public hearing on the proposed amendment.

All comments and requests regarding the proposed amendment must be submitted in writing to the Department within the specified time period.

5. If requested during the public comment period, and if the Department determines there is significant interest, a public hearing must be scheduled by the applicant. A public notice providing at least 30 days notice of the hearing must be published in the New Jersey Register and two newspapers of general circulation. The public notice must also be sent to any applicable designated planning agency and to each party that was requested to endorse the amendment. The public comment period will be extended until 15 days after the hearing. The applicant must provide for publication of the public notice in two newspapers, secure a court stenographer, and provide three copies of verbatim transcript of the hearing to the Department.

6. If any comments submitted during the public comment period, or in response to a request for a statement of consent, raise substantial new question(s), the Department may extend the public comment period for up to another 30 days, disapprove the proposed amendment and return it to the applicant, return the amendment request to the applicant for necessary changes, or modify the amendment request for proposal as a new amendment request.

7. An amendment is not valid until the Governor's designee, the Department, adopts the amendment, either as proposed or with minor changes. The Department will provide written notification to the applicant of the decision of the Governor's designee. Notice of the final decision will be published in the New Jersey Register.

Note: DPAs may have their own amendment procedures that must be met. If a DPA approves an amendment, it is not valid until the Department adopts the amendment.

WASTEWATER MANAGEMENT PLANS

I. TITLE PAGE

The title page should include the following:

1. Wastewater Management Plan Name
2. Date of Document (only the date of the present submittal should appear)
3. Name of Wastewater Management Planning Agency Submitting Document
4. Water Quality Management Planning Area(s) Names
5. Watershed Management Area(s) Names
6. Preparer of Wastewater Management Plan (name, title, agency, address, and phone number)

II. TABLE OF CONTENTS REQUIREMENTS

The table of contents should identify the following:

1. Identify each section by name and page number. (Use the categories identified in this document as a guide.)
2. List by name and/or number all maps, figures and tables contained in the WMP.

III. INTRODUCTION:

The first paragraph should read:

"The purpose of this document is to provide a comprehensive Wastewater Management Plan (WMP) for (insert name of WMP planning agency). The WMP has been submitted to the New Jersey Department of Environmental Protection (Department) for approval so that it may be incorporated into the (insert name of WQMP) Water Quality Management Plan(s) via the plan amendment procedure (N.J.A.C. 7:15)."

Provide a brief background narrative of the wastewater management facilities within the WMP planning and/or study area (NO MORE THAN THREE [3] PAGES). A discussion of the existing WMP Planning area and any changes to this area, which will occur upon WMP adoption, should be included in this section. Include a discussion on district membership, customer communities and franchises.

IV. SUMMARY TABLE OF SIGNIFICANT ACTIONS

The Summary Table should concisely cite all significant actions proposed in the WMP. Significant activities would include such items as:

1. Any change in the WMP planning agency or the extent of the WMP planning area which becomes effective upon adoption of this WMP [see N.J.A.C. 7:15-5.11(b)].
2. Changes in the boundaries of wastewater treatment facilities sewer service areas and/or areas to be served by surface or ground water disposal facilities.
3. New or expanded wastewater treatment facilities (specifying the projected wastewater flow).
4. Abandonment of treatment facilities (specify where the wastewater flow will be conveyed).

5. A list of the environmental analyses and assessments performed to assess the environmental impact of the activities proposed in the WMP.

V. DISCUSSION OF EXISTING AND FUTURE WASTEWATER FACILITIES

[see N.J.A.C. 7:15-5.16(a)3 and 5.18(c)1 for which facilities to include in the WMP].

A. A brief narrative of each sewage treatment facility within the WMP area or serving any portion of the WMP area.

B. A Facility Table should be completed for each of the facilities discussed above. Attached is an outline that should be followed to create a Facilities Table for each facility. A more detailed description of the information being requested is included with the Facilities Table outline. Most of the information needed to complete these tables will already have been compiled to complete the Amendment/Revision Application Form including the Wastewater Flow Calculation Worksheet and the Department's projected wastewater flow criteria. See the Pre-Application Form for additional guidance.

The following notes are required in the text:

1. "All existing, new, or expanded industrial pretreatment facilities requiring Significant Indirect User (SIU) permits and/or Treatment Works Approvals, and which are located within the specified sewer service area, are deemed to be consistent."
2. "Individual subsurface sewage disposal systems (ISSDS) for individual residences can only be constructed in depicted sewer service areas if legally enforceable guarantees are provided, before such construction, that use of such systems will be discontinued when the depicted sewer service becomes available. This applies to ISSDS that require certification from the Department under the Realty Improvement Sewerage and Facilities Act (N.J.S.A. 58:11-23) or individual Treatment Works Approval or New Jersey Pollutant Discharge Elimination System Permits (under N.J.A.C. 7:14A). It also applies to ISSDS which require only local approvals if the WMP acknowledges adequate arrangements for enforcement of the requirement (such as through a municipal or sewerage authority ordinance)."
3. "Development in areas mapped as wetlands, flood prone areas, designated river areas, or other environmentally sensitive areas may be subject to special regulation under Federal or State statutes or rules. Interested persons should check with the Department of Environmental Protection for the latest information. Depiction of environmental features is for general information purposes only, and shall not be construed to define the legal geographic jurisdiction of such statutes or rules."

The following notes are required in text when applicable to the particular area:

1. "Pre-existing grant conditions and requirements (from Federal and State grants or loans for sewerage facilities) which provide for restriction of sewer service to environmentally sensitive areas, are unaffected by adoption of this WMP and compliance is required."
2. New Jersey's coastal zone extends from the New York border south to Cape May Point and then north to Trenton. It encompasses the waters and waterfronts of the Hudson River and related water bodies south of the Raritan Bay, the Atlantic Ocean and some inland areas from Sandy Hook to Cape May, the Delaware Bay and some inland areas, and the waterfront of the Delaware and related tributaries.

The coastal zone encompasses areas in which the State has the authority to regulate land and water uses through the Coastal Area Facility Review Act (CAFRA), Waterfront Development Law and Wetlands Act of 1970.

For WMPs which include areas within New Jersey's regulated Coastal Zone as defined at N.J.A.C. 7:7E-1.2(b) the following statement must be included within the narrative and on the mapping. Compliance with this statement is mandatory.

"Proposed developments tying into existing and proposed sewer service areas which require coastal permits must demonstrate compliance with all applicable sections of the Coastal Zone Management rules including, but not limited to, Wetlands (N.J.A.C. 7:7E-3.27), Wetlands Buffers (N.J.A.C. 7:7E-3.28), Endangered or Threatened Wildlife or Vegetation Species Habitat (N.J.A.C. 7:7E-3.38), Secondary Impacts (N.J.A.C. 7:7E-6.3), Public Facility Use Policies (N.J.A.C. 7:7E-7.6), Water Quality (N.J.A.C. 7:7E-8.4), Ground Water Use (N.J.A.C. 7:7E-8.6) and the policies under General Land Areas rules, Subchapters 5, 5A and 5B."

3. For WMPs which include areas within New Jersey's Pinelands Area, defined at N.J.S.A. 13:18A-11, the following statement must be included within the narrative and on the mapping.

"For facilities (including but not limited to sewer connections, sewer extensions and on-site treatment plants) which are located in the Pinelands Area, as defined at N.J.S.A. 13:18A-11, the approval of the Pinelands Commission pursuant to the requirements of the Pinelands Comprehensive Management Plan (CMP) is required prior to construction. All facilities and activities included within this WMP should be consistent with the requirements of the CMP."

4. For WMPs which include "nondegradation areas" as discussed within section V, the following statement must be included in the narrative.

"Nondegradation water areas shall be maintained in their natural state (set aside for posterity) and are subject to restrictions including, but not limited to, the following: 1) DEP will not approve any pollutant discharges to an FW1 stream, with the exception of upgrades to or continued operation of existing facilities serving existing development. 2) DEP will not approve any pollutant discharge to ground water nor approve any human activity which results in a degradation of natural quality except for the upgrade or continued operation of existing facilities serving existing development. For additional information please see the Surface Water Quality Standards at N.J.A.C. 7:9B, and/or the Ground Water Quality Standards at N.J.A.C. 7:9-6."

VI. SUMMARY OF ENVIRONMENTAL ASSESSMENTS AND ANALYSES

Provide a summary of the results and strategies chosen to address the findings of the environmental analyses or assessments. The following analyses or assessments may be deemed applicable and may be required by the Department:

1. Environmental Constraints/Buildout Analysis

An environmental constraints analysis (ECA) is a buildout analysis modified to account for the constraints to development that arise because of the presence of environmentally sensitive areas and the need to protect them. The ECA is needed to assess the proposed sizing of the treatment facilities and the appropriate location and extent of the proposed sewer service areas. This analysis must delineate existing land use and portray the changes that would result from development in accordance with current zoning, taking into account environmental constraints, in each of the proposed sewer service areas.

The information included in the ECA for the future sewerage of properties should be summarized in the text portion of the amendment with complete details and

methodology submitted as a separate document. The environmentally constrained areas that must be considered include wetlands; floodplains; stream corridors; threatened and endangered species sites or designated habitats in accordance with the Department's Landscape Project Areas 3, 4 and 5 for water dependant species and Natural Heritage database; and parks and preserves. Specific requirements follow:

- A. Submit mapping that clearly depicts the following:
 - 1) Developed areas;
 - 2) Environmentally constrained areas;
 - 3) Developable areas (undeveloped areas that are not environmentally constrained)
 - 4) A representation of applicable zoning showing principal permitted uses as well as permitted densities and/or lot (building) coverages within the developable areas;
- B. Provide a table or tables with the following information for each sewer service area of each existing, approved or proposed wastewater treatment facility, both surface and groundwater discharges. All assumptions used in calculating wastewater flows from population, dwelling units, and building area coverage shall be explained.
 - 1) The total existing population
 - 2) Wastewater flows from existing or approved population/development, whether currently sewered or unsewered, that is/will be served
 - 3) The extent of development that could occur according to applicable zoning in developable areas presented as follows:
 - a) the number of dwelling units per acre and number of acres for each residentially zoned area, as well as the corresponding population increase,
 - b) building area coverage per acre and acres for each commercially or industrially zoned area.
 - 4) Projected future wastewater flows shall be identified for each zone in a) and b) above in accordance with the Department's rules on wastewater flow projections at N.J.A.C. 7:14A-23.3.
 - 5) A summary of total existing and projected future wastewater flows attributed to residential, commercial, industrial, and infiltration/inflow sources. Total flows for wastewater treatment plants discharging to surface water shall be expressed as a thirty day average. Total flows for wastewater treatment plants discharging to ground water shall be expressed as a daily maximum.

With regard to consideration of Threatened and Endangered species under the environmental constraints analysis, the objective is to avoid impacts to threatened and endangered species and their habitat. The Department's Division of Fish and Wildlife (DFW), Endangered and Non-Game Species Program has developed the "Landscape Project" which identifies state and federally listed endangered or threatened species habitat. Please utilize the Landscape Project Maps to assist in the determination of the specified endangered and/or threatened species habitat within the project area. Undeveloped land within Landscape Project Areas 3, 4 and 5 must be designated as "General service areas for wastewater facilities with planning flows of less than 2,000 gallons per day which discharge to ground water." Please also refer to the Threatened and Endangered Species Analysis discussed below.

2. **Nonpoint Source Pollutant Loading/Hydromodification Analysis**

The objective for this analysis is no increase in nonpoint source pollution. There are quality and quantity components of this objective. Because this is a WMP where specific plans for future development are not available, to demonstrate conformance with the stated environmental objective, a municipal site development ordinance(s) must be crafted which will achieve the following quality and quantity performance standards. The performance standards must be met through the use of low impact development measures if possible; if low impact development measures are insufficient, alone, to meet the performance standards, then supplement with structural BMPs as necessary.

Low impact development measures include the following:

- A. Protect areas that provide water quality benefits, such as forested areas or stream corridors, or areas particularly susceptible to erosion and sediment loss.
- B. Minimize impervious surfaces or break up or disconnect the flow of runoff over impervious surfaces.
- C. Maximize the protection of natural drainage features and vegetation.
- D. Minimize the decrease in time of concentration.
- E. Minimize land disturbance including clearing and grading.
- F. Minimize soil compaction.
- G. Provide low-maintenance landscaping that encourages retention and planting of native vegetation and minimizes the use of lawns, fertilizers and pesticides.
- H. Provide vegetated open-channel conveyance systems discharging into and through stable vegetation areas.
- I. Provide preventative source controls that minimize the use or exposure of pollutants, such as trash receptacles, features to prevent trash and debris from drainage systems, features to prevent or contain spills or other harmful pollutants at industrial or commercial developments, and the application of fertilizer in accordance with the Soil Erosion and Sediment Control Standards.

Any land area used as a nonstructural stormwater management measure must be restricted to maintain that environmental benefit. The nonstructural stormwater management strategies utilized should be identified. If a nonstructural stormwater management strategy was not utilized, a justification shall be provided.

Quantity performance standards include recharge, peak and quality:

A. Recharge

- 1) Demonstrate that 100 percent of the average annual groundwater recharge volume is being maintained after development, OR

Note: To assist in this evaluation, please refer to the groundwater recharge spreadsheet link available on the Division of Watershed Management (DWM) website at <http://www.nj.gov/dep/watershedmgt/bmpmanual2003>.

- 2) Infiltrate the increase in runoff volume for the 2-year storm.

Note: Demonstrate that the impact on the groundwater table does not cause adverse hydraulic impacts. Recharge of stormwater runoff from areas of high pollutant loading areas are prohibited, unless specifically directed by the Department. Please utilize the NRCS Urban Hydrology for small Watersheds TR-55 methodology.

B. Peak

- 1) Demonstrate that the project does not, at any point, increase the existing runoff hydrographs for the 2, 10, and 100-year storm events, OR
- 2) Demonstrate that there is no increase in peak runoff rates for the 2, 10, and 100-year storm events AND that the increase volume or change in timing will not increase flood damage at or downstream of the site OR
- 3) Demonstrate that the stormwater management measures on-site reduce the peak flow rates for the 2, 10, and 100-year storms by 50%, 75%, and 80%, respectively.

Quality performance standards follow:

Stormwater management measures shall be provided on site to reduce the post-construction load of total suspended solids in stormwater runoff generated from the water quality design storm. The design of the site shall include structural and nonstructural measures that optimize nutrient removal.

Post-construction load of Total Suspended Solids is to be reduced by 80% and the nutrient loads are to be reduced to the maximum extent practicable. Removal rates are as presented in the following table:

<u>Table 1: TSS Removal Rates for BMPs</u>	
<u>Best Management Practice</u>	<u>TSS % Removal Rate</u>
<u>Bioretention Systems</u>	<u>90</u>
<u>Constructed Stormwater Wetland</u>	<u>90</u>
<u>Forested Buffers</u>	<u>70</u>
<u>Extended Detention Basin</u>	<u>40-60</u>
<u>Infiltration Structure</u>	<u>80</u>
<u>Manufactured Treatment Device</u>	<u>See N.J.A.C. 7:8-5.7(c)</u>
<u>Sand Filter</u>	<u>80</u>
<u>Vegetative Filter Strip</u>	<u>50</u>
<u>Wet Pond</u>	<u>60-90</u>

Other stormwater management measures or removal rates may be utilized if the applicant demonstrates that the proposed measure meets the nonpoint source/hydromodification criteria.

Please include your stormwater management ordinance, which meets the requirements of the Stormwater Management Regulations. Please refer to the Department's website at http://www.njstormwater.org/tier_A/pdf/NJ_SWBMP_D.pdf for the model stormwater management ordinance.

3. **Point Source Pollutant Loading Analysis**
Surface Water Discharges (Antidegradation Analysis):

Any proposal to increase a wastewater discharge to surface water must be carefully assessed relative to antidegradation requirements. First, alternatives must be considered which will achieve the goal of no increased discharge to the receiving water. These may include a discharge to groundwater for incremental flow or a beneficial reuse of effluent, such as at a golf course. If an analysis of the alternatives indicates there is no feasible means to prevent an increase in discharge, then determine if the expansion can occur with no increase in load or concentration of parameters of concern. If this is not feasible, then a stream study would be required, the scope of which would need to be approved by the Department before proceeding. Through such a study the parameters of concern and effluent requirements to achieve the standard of antidegradation would be identified. Treatment options may be available to meet the antidegradation requirements and would need to be presented and evaluated. If all options have been explored and a lowering of water quality is still foreseen, the applicant would have to demonstrate why such a lowering should be permitted. This would include an identification of the socially and economically important development that would be affected if this lowering is not allowed. The social and economic impact must be compared to the expected impact on existing water quality, as well as the affect on the existing uses and designated uses for the receiving water (as established in the N.J.A.C. 7:9B, Surface Water Quality Standards).

Groundwater Discharges (Nitrate Dilution):

With regard to ground water quality impacts as new or expanded discharges are proposed, they will be evaluated through the NJPDES permitting process. For areas designated DGW <2,000 gpd, to demonstrate conformance with the objective of protecting groundwater quality, application of the nitrate dilution model will be required. The goal of this analysis is to meet antidegradation for groundwater or 5.2 mg/l whichever is more stringent. Please be aware the Highlands target will be established by regulation consistent with the statutory requirement. There are two acceptable methods to meet this objective:

1. Apply the nitrate dilution model for the designated areas to determine the minimum lot size that would support conformance with the groundwater quality standards. Adjust zoning in the designated areas to conform with this lot size determination.
2. Adopt a zoning overlay ordinance that requires, as part of the subdivision and site plan approval process, that the nitrate dilution analysis be applied to ensure that the number of units allowed, regardless of underlying zoning, supports conformance with the groundwater standards.

The nitrate dilution model is available on the Department's web site at http://www.nj.gov/dep/watershedmgt/wmp_rule_model.htm

4. **Depletive/Consumptive Water Use Analysis**

Please provide a map showing the water purveyor service areas within the planning area, including name, well allocation or water diversion permit numbers and rates.

If a new or expanded source is needed:

If additional supplies are anticipated to be needed, it will be necessary to demonstrate that the proposed increased use will not adversely impact the source water resource or existing uses. If a new or expanded water allocation permit is required for the water supply, this analysis will be conducted as part of the Water Allocation permitting process, to be conducted concurrently with the amendment process. Applicant must submit separate application to the Bureau of Water Allocation. Otherwise, if the increased use remains less than 100,000 gpd, or 50,000 gpd in the Highlands Protection Area an analysis is required as part of the amendment process.

a) Surface water or surficial aquifer source:

For the purpose of this analysis, depletion of baseflow is presumed to be equal to the amount of water which has been diverted or otherwise removed from a body of water or surficial groundwater without being returned. New water use may not exceed a net reduction of 10 percent of the aquifer recharge over the area extent of the proposed project area. If the demand exceeds this amount, then methods and measures to offset the excess decrease in surface water baseflow, must be identified and implemented. Such methods and measures may include: reducing existing water demands/uses through conservation or other means, increasing infiltration of stormwater, reuse of treated effluent for recharge or irrigation purposes, use of water supply from non-critical areas, adopting conservation-based outside water use ordinances or any other reasonable actions. The application must identify the implementation plan for measures that are feasible, timing and responsible entity.

b) Confined aquifer source:

Must determine if the proposed increase or new source is consistent with any restrictions or other provisions of any of the following that apply to the area: Critical Water Supply Areas 1 or 2; South Jersey PRM; Pinelands out of basin transfer.

5. Riparian Corridor Analysis

The objective to be served by this analysis is no loss of value due to potential short term or long term disturbance of these corridors. The no loss of value objective must follow the “avoid→ minimize→ mitigate” approach: efforts to avoid all negative impacts should be attempted first; where total avoidance is not feasible, then effectively minimizing those negative impacts may be undertaken; lastly, measures to mitigate remaining negative impacts can be offered. The stream corridor, or area of concern, for the purpose of this analysis, is 300 feet from top of bank (or centerline of a first order stream where no bank is apparent) for waters designated as Category One or within the Highlands Preservation Area, 150 feet for waters designated FW 1 and FW 2-Trout Production and 75 feet for all other FW classifications. Please note that streams are identified as blue lines on quad sheets or on the County Soil maps. The objective of no loss of value can be achieved by ensuring that there is no disturbance within the applicable 75, 150 or 300 foot area of concern. Otherwise, where there is proposed encroachment within stream corridors, including stormwater outfalls, demonstrate that the functions of the existing stream corridors won't be impaired by the proposed development, or if there will be impairment, how this impairment will be minimized/mitigated. These functions include but are not limited to filtering of stormwater runoff, nutrient uptake, groundwater storage and recharge, forest canopy, vegetative litter, wildlife habitat, bank stabilization, and flood

protection. Because this is a WMP, adoption, by the municipality, of a stream corridor protection ordinance designed to achieve the stated objectives and the removal of SSA from the corridor are the means to ensure that stream corridors will not be compromised through changes in land use.

6. Endangered/Threatened Species Analysis

To demonstrate conformance with the stated environmental objective, all sewer service area should be removed from Ranks 3 (State Threatened), 4 (State Endangered) and 5 (Federal Threatened and/or Endangered) and/or a municipal site development ordinance(s) must be crafted which will require that a Threatened or Endangered Species Habitat Analysis be conducted to provide supporting documentation indicating if Federal or State listed endangered or threaten species habitat is present on the site of any new construction proposed within the Township and SSA. The Threatened or Endangered Species Habitat Analysis shall include, but not necessarily be limited to the following:

- a) All applicants of proposed development projects within the Township must screen for the existence or nonexistence of endangered or threatened species habitat on the project site by utilizing the NJDEP "Landscape Project".
- b) If specific species habitat of concern as depicted by the NJDEP Landscape Project Maps for Rank 3, 4 and 5 habitat areas is identified, the applicant may choose to have a qualified Environmental Scientist/Biologist or Ecologist perform a site specific analysis to identify or confirm all species and the approximate location of the habitat within the project location.
- c) If the proposed development falls within a Landscape Project Area Rank 3, 4, or 5, measures to avoid any negative impacts to confirmed critical habitat areas identified shall be the primary goal of the project design and are to be taken into consideration first.
- d) The submission of a Conservation Plan is required for all unavoidable impacts to critical habitat areas that have been identified. The Conservation Plan shall provide measures to permanently protect those critical habitat areas from future impacts from development. Measures should include protection of identified areas with a conservation/deed restriction.

7. Alternatives Analysis

Describe alternatives (actions taken) or other options that would avoid, reduce, mitigate, any negative impacts as a result of the proposed project. Discuss the feasibility and prudence of the alternatives.

8. Any Others

VII. DISCUSSION OF JUSTIFICATION OF THE SERVICE AREA DELINEATIONS

Provide a brief narrative explaining how the above required environmental analyses and/or assessments were used as the basis for determining the service area delineations. Also provide summarized information regarding any applicable zoning ordinances, municipal master plans or county master plans that are impacted by the wastewater service area designations within the WMP.

The date of adoption must be specified for the utilized ordinances or master plans. For zoning, a table summarizing the principally permitted uses, conditionally permitted uses, minimum lot size, and maximum unit densities permissible in each zone must be provided. Similarly, summarized information should be provided for master plans. (Do not include the zoning or land use documents themselves in the WMP. If needed, the Department will request specific items upon review.)

N.J.A.C. 7:15-3.6 provides that the Coastal Zone Management rules are the basic policy direction for Water Quality Management planning in the coastal zone of New Jersey. Therefore, service area delineations should not conflict with the Coastal Zone Management rules, particularly the Wetland rule, N.J.A.C. 7:7E-3.27, Wetland buffer rule, N.J.A.C. 7:7E-3.28, General Land Area rules, N.J.A.C. 7:7E-5, 5A and 5B, Secondary impacts rule, N.J.A.C. 7:7E-6.3, Public facility use rule, N.J.A.C. 7:7E-7.6, Water quality rule, N.J.A.C. 7:7E-8.4 and Groundwater use rule, N.J.A.C. 7:7E-8.6.

Determining the appropriate development intensity for a site within New Jersey's coastal zone is dependent upon the site's location within the upland waterfront development area or CAFRA area. For sites located in the upland waterfront development area, development intensities are determined using three factors: growth rating, environmental sensitivity and development potential. These ratings are based upon development patterns, cultural and natural patterns.

For the CAFRA area, the site-by-site evaluation of a site's acceptable development intensity has been replaced with a comprehensive environmental design strategy. This design strategy is based in large part on planning decisions at the State, county and municipal levels, and reflects growth management principles. Further, this strategy encourages the concentration of development in areas where development already exists and where infrastructure is already in place. As a result, the development intensity of a site located in the CAFRA area is dependent upon the site's location in a coastal center; a Coastal Planning Area; in a CAFRA center; CAFRA core; or CAFRA node.

Under N.J.A.C. 7:15-3.7, comments shall be sought from the Pinelands Commission on proposed Water Quality Management plan amendments pertaining to the Pinelands Area defined at N.J.S.A. 13:18A-11 or the Pinelands National Reserve defined at 16 U.S.C. 471I(c), to ensure that such amendments are consistent with the intent and programs of the Pinelands Protection Act, N.J.S.A. 13:18A-1 et seq., and section 502 of the National Parks and Recreation Act of 1978, 16 U.S.C. 471i. Amendment requests, which are inconsistent with the intent of the Pinelands Comprehensive Management Plan, may be disapproved by the Department.

Areas located within the watershed of a Fresh Water One (FW1) stream, as classified in the Surface Water Quality Standards, and/or that have Class I-A ground water (Ground Water of Special Ecological Significance), as classified in the Ground Water Quality Standards, should be identified as "Nondegradation water area based on the Surface Water Quality Standards at N.J.A.C. 7:9B, and/or the Ground Water Quality Standards at N.J.A.C. 7:9-6." Where this requirement has been studied and reviewed as part of the Wastewater Management Planning process, this classification should appear on Map #3 (Future Wastewater Facilities and Service Areas). Nondegradation water areas shall be maintained in their natural state (set aside for posterity) and are subject to restrictions including, but not limited to, the following: 1) DEP will not approve any pollutant discharges to an FW1 stream, with the exception of upgrades to or continued operation of existing facilities serving existing development. 2) DEP will not approve any pollutant discharge to ground water nor approve any human activity which results in a degradation of natural quality except for the upgrade or continued operation of existing facilities serving existing development. For additional information please see the Surface Water Quality Standards at N.J.A.C. 7:9B, and/or the Ground Water Quality Standards at N.J.A.C. 7:9-6.

VIII. MAPPING REQUIREMENTS

Mapping should not include excessively thick lines for delineating boundaries, or excessively dark graphic shading which obscures the base map details. Provide mapping information in the form of digital GIS data (disk) or a USGS quadrangle map delineating the proposed sewer service area boundary and location of the proposed new or expanded wastewater treatment facility and discharge location, if applicable. Include site plans if applicable.

Mapping information should be submitted in the form of digital GIS data, whenever possible. The digital maps shall be accurate, at a minimum, to a scale of 1:12,000. The NJDEP will provide its GIS theme coverage, associated meta-data and the digital data transfer standards at N.J.A.C. 7:1D Appendix A at the request of the applicant. The creation of new GIS data layers shall be prepared in a format which is consistent with the NJDEP's digital data transfer standards at N.J.A.C. 7:1D, Appendix A.

The NJDEP's 1991/92 quarterquad basemap series may be used to prepare the amendment or revision. Maps shall be in New Jersey State Plane Feet using the North American Datum of 1983 (NAD83). Maps shall meet United States National Map Accuracy Standards for a scale of 1:12,000. Other maps at other scales may be submitted as supplements to the base mapping, such as an overview map for a regional or county WMP area to define the overall pattern of wastewater facilities and service areas.

The paper copies of the USGS quadrangle maps being submitted must use the 1:24,000 scale.

All Maps must be clear and easily readable. Each map must have a complete and readily understandable legend.

For clarity, if a WMP planning area includes numerous USGS quadrangles, an 8 1/2" x 11" "key map" showing the WMP planning area and the outlines and names of the quadrangles should also be included.

Guidance for preparing wastewater management plan mapping is contained in the attachment labeled "Mapping Information" in the Water Quality Management Plan Amendment & Revision Application form. All maps must use the proper scale, except Map #4, the Zoning/Master Plan mapping. No enlargement or reduction to this base should be made. Supplemental maps may be used to clarify the same information (i.e., lot line or tax maps providing a more detailed delineation of service areas); however, both maps must clearly indicate which is to take precedence in case of service area discrepancy.

Two service area maps must be submitted - one depicting the existing wastewater facilities and service areas and one depicting the future wastewater facilities and service areas (this includes existing facilities and service areas which will remain). Other features may be combined on maps as long as the mapping remains clear and is not confusing. (Example: planning area and existing wastewater facilities and service areas mapping could be combined). Much of this decision depends on the particular area. If in doubt, use separate maps.

Copies of USGS quadrangle maps are available from the NJDEP Bureau of Revenue, Maps and Publications located at 428 East State Street, Trenton, NJ, 08625. They may be contacted at (609) 777-1038.

INTRODUCTION: Include a brief narrative introduction to the map section. If certain features are absent or not applicable to the particular area this should be stated.

MAP #1: PLANNING AREA

The following features (when applicable) must be identified on this map:

1. Current WMP Planning Area Boundary and WMP Area in Effect upon Adoption of WMP (specify which is depicted)
2. Water Quality Management Planning Area(s) Boundaries
3. Municipal Boundaries
4. Watershed Management Area Boundary
5. Areas within the Hackensack Meadowlands District (defined in N.J.S.A. 13:17-4)
6. Pinelands Area (defined in N.J.S.A. 13:18A-11)
7. Pinelands National Reserve (defined in 16 U.S.C. Section 471i(c))
8. Coastal Area (CAFRA as defined in N.J.S.A. 13:19-4)
9. Sewerage Authority and Municipal Utilities Authority Districts
10. Franchise Areas for Sewer Utilities Regulated by the Board of Public Utilities.
11. Franchise Areas for Water Purveyors Regulated by the Board of Public Utilities

MAP #2: EXISTING WASTEWATER FACILITIES AND SERVICE AREAS

This map **must** identify only the present extent of the **actual** sewer infrastructure. Delineated actual sewer service area should consist of only those areas where actual waste conveyance appurtenances are physically constructed and in use or for which a Treatment Works Approval permit with a wastewater flow allowance has been issued.

If the treatment facility is located within the current WMP planning area, the entire service area, within and outside of the WMP planning area, **must** be mapped. If the treatment facility is located outside of the current WMP planning area, only the service area portion which occurs within the WMP planning area need be mapped with the treatment facility to which the area flows clearly marked. (If the treatment plant and/or discharge outfall lies outside of the WMP planning area at a distant location it is permissible to use a quad sheet inset.)

1. The following existing sewage related facilities must be identified:
 - a. Major interceptors and trunk lines
 - b. Pumping stations
 - c. Treatment plants discharging to surface water (with NJPDES permit number specified)
 - d. Treatment plants discharging to ground water having wastewater planning flows of 2,000 gpd or greater (with NJPDES permit number specified)
 - e. Wastewater discharge outfalls
 - f. Combined sewer overflow outfalls
 - g. Sanitary sewer overflow outfalls
2. The following existing service areas should be individually identified:
 - a. Service area of all facilities, domestic or industrial, discharging to surface water. (Specify each treatment plant by name and NJPDES permit number.)
 - b. Service areas of facilities discharging to ground water (including spray irrigation), domestic or industrial, having wastewater planning flows of 2,000 gpd or greater. (Specify each treatment plant by name and NJPDES permit number.)
 - c. Areas served by subsurface sewage disposal systems with wastewater planning flows less than 2,000 gpd (Note: Individual subsurface sewage disposal systems, e.g., septic tanks, would fall into this category). This is a general service area designation and you need not individually identify each facility's service area. This category should be identified in the legend as "Service Area for Wastewater Facilities with Planning Flows of Less Than 2,000 gpd Which Discharge to Ground Water."

MAP #3: FUTURE WASTEWATER FACILITIES AND SERVICE AREAS

This map must include all facilities and service areas which are **proposed to exist in the future including existing facilities that will remain and any proposed or anticipated facilities**. Areas previously approved for sewer service beyond where the present extent of the actual sewer infrastructure exists (as shown on Map #2 above) must be shown on this map and be clearly identified for comparison with those additional areas proposed to be serviced or not serviced in the future as part of the proposed plan. Upon adoption of the wastewater management plan all identified existing and future sewer service areas of specified wastewater treatment facilities will be referred to collectively as "approved sewer service area". The Department prefers the use of a Lot and Block based map if possible.

If the treatment facility is located within the current WMP planning area, then the entire service area, within and outside of the WMP planning area, must be mapped. If the treatment facility is located outside of the current WMP planning area, only the service area portion that occurs within the WMP planning area need be mapped.

1. The following future sewage related facilities must be identified:
 - a. Major interceptors and trunk lines
 - b. Pumping stations
 - c. Treatment plants discharging to surface water (with NJPDES permit number specified)
 - d. Treatment plants discharging to ground water having wastewater planning flows of 2,000 gpd or greater (with NJPDES permit number specified)
 - e. Wastewater discharge outfalls
2. The following future service areas should be individually identified. A code (in parenthesis) is provided with each Wastewater Service Area (WSA) Type that will correspond to the Departments Wastewater Service Area database. These codes should also be specified on the mapping.
 - a. Service area of all facilities, domestic or industrial, discharging to surface water. (Specify each treatment plant by name and **NJPDES permit number** in the legend.)
WSA Type (SW)
 - b. Service area of facilities discharging to ground water (including spray irrigation), domestic or industrial, with wastewater planning flows of 2,000 gpd or greater. (Specify each treatment plant by name and **NJPDES permit number** in the legend.)
WSA Type (GWIND)
 - c. Areas served by subsurface sewage disposal systems with wastewater planning flows less than 2,000 gpd (Note: Individual subsurface sewage disposal systems, e.g., septic tanks, or Treatment Works with discharges to ground water with a daily maximum design flow of less than 2,000 gallons serving non-residential development, as well as two to five homes on a single septic would fall into this category). This is a general service area designation and you need not individually identify each facility's service area. This category should be identified in the legend as **"General Service Area for Wastewater Facilities with Planning Flows of Less Than 2,000 gpd which Discharge to Ground Water"**.
WSA Type (SEPTIC)

- d. Areas that are classified as “Nondegradation” area based on the requirements in section V of this document should be identified on this map as **“Nondegradation Area”**. Where Nondegradation areas occur, the following note should be placed on this map:

“Nondegradation water areas shall be maintained in their natural state (set aside for posterity) and are subject to restrictions including, but not limited to, the following: 1) DEP will not approve any pollutant discharges to an FW1 stream, with the exception of upgrades to or continued operation of existing facilities serving existing development. 2) DEP will not approve any pollutant discharge to ground water nor approve any human activity which results in a degradation of natural quality except for the upgrade or continued operation of existing facilities serving existing development. For additional information please see the Surface Water Quality Standards at N.J.A.C. 7:9B, and/or the Ground Water Quality Standards at N.J.A.C. 7:9-6.”

WSA Type (Nondeg)

PLEASE NOTE: There are known cases of existing infrastructure or areas where there can be no wastewater infrastructure that do not conform to the categories of wastewater service area that appear above. Where these types of infrastructure exist, the following categories may be used as applicable or the applicant should contact the Department to determine if a new category is necessary.

- e. **“Service area of a facility that discharges to both Surface and Ground Waters,”** regardless of the wastewater flow amount. (Specify treatment facility by name and NJPDES permit number in the legend)
- f. **“Non-Discharge areas.”** These are areas where it has been determined that it is inappropriate for any wastewater infrastructure to occur due to environmental regulations (for example, Pinelands Preservation Areas) or studies of the area. WSA Type (NONDISCH)
- g. **“Open Space.”** Areas owned by federal, state, county, or municipal government agencies or preserved through programs administered by any government agency or preserved through private investment or purchase of development rights where no sewerage generating structures are planned to occur. WSA Type (Open Space)
- h. **“Area served by a wastewater holding tank”**. Holding tanks are only used when no other wastewater treatment options work to correct an existing wastewater disposal problem. Holding tanks are not approved for new development. WSA Type (HoldingTank)

- 3. Pursuant to N.J.A.C. 7:15-5.20(b)2, wherever feasible, and if not in conflict with the basis provided in section V of the narrative, the BOUNDARIES OF FUTURE SERVICE AREAS SHALL COINCIDE WITH RECOGNIZABLE GEOGRAPHIC OR POLITICAL FEATURES (i.e., roads, lot lines, zoning area boundaries, water bodies). Individual lots should not be divided into different service areas unless a zoning boundary or obvious feature (i.e. stream) is used that divides the lot. Should such features not be used, an ordinance by the appropriate governing body explaining why these features were not used and providing a clear description of the requested boundaries will be required as part of the WMP document.
- 4. In determining service areas, please be aware that areas zoned for two or more residential units per acre, or which are commercially or industrially zoned, generally will be required to demonstrate that adequate wastewater treatment facilities exist or

can be created to address the wastewater requirements of all development allowed under that zone. Environmental analyses and assessments will be required to demonstrate this. Should there not be adequate ability to address the wastewater that a site may generate, zoning modification may need to be considered. Septic management ordinance/program may be necessary to minimize the water quality impact from existing development.

5. Depicted service area delineations should not be in conflict with the Rules on Coastal Zone Management as explained in section V. It is recommended that Coastal Growth Rating Designations be used and delineated on service area mapping.
6. The required text notes listed section V. Discussion of Existing and Future Wastewater Facilities are also required on this map plus the following additional note:

“Locations of future pump stations, major interceptors, and trunk sewers are being provided for general information only and will not serve as the basis for any future consistency determinations or permit reviews unless the pump station, major interceptor or trunk sewer is part of a State or federally funded project.”

MAP #4: ZONING OR MASTER PLAN

A copy of the adopted zoning or master plan map for all areas covered by the wastewater management plan must be submitted. This map should include lot lines. This map need not initially be transferred to the USGS quad map base. If transfer is necessary the Department will request this upon review.

MAP #5: ENVIRONMENTAL FEATURES

For the following environmental features N.J.A.C. 7:15-5.17(a) through (g) should be consulted. See also the attached "Contacts for Obtaining Additional Information".

The exact number of maps needed to identify these features will depend on the particular area. Several features can be combined on a single map; however, all mapping must be clear and easily readable.

The following features must be delineated:

- a. Major Drainage Basin Boundaries [U.S.G.S. Hydrologic Unit Code (HUC) 14 and HUC 11 Watersheds]
- b. Freshwater and estuarine wetlands
- c. Flood prone areas
- d. Public open space and recreation areas (10 acres or greater in size)
- e. New Jersey and Federal Wild and Scenic Rivers
- f. Fresh Water One (FW1) Waters, Category One (C1) Waters, trout production and trout maintenance waters
- g. All other open waters
- h. Conservation Lands – all lands preserved under conservation easements including farmlands preserved through the purchase of development rights or in fee simple absolute
- i. Landscape Project Areas Rank 3, 4, and 5
- j. 75' buffer of all waterways not requiring 150' or 300' buffers
- k. 150' buffer of FW 1 and FW 2-Trout Production
- l. 300' buffer of C1 waters or reservoirs
- m. Natural Heritage Priority Sites
- n. Highlands Preservation Area
- o. Highlands Planning Area

The following note must appear on the map(s):

"Development in areas mapped as wetlands, flood prone areas, designated river areas, or other environmentally sensitive areas may be subject to special regulation under Federal or State statutes or rules. Interested persons should check with the Department of Environmental Protection for the latest information. Depiction of environmental features is for general information purposes only, and shall not be construed to define the legal geographic jurisdiction of such statutes or rules."

DOMESTIC OR INDUSTRIAL TREATMENT FACILITIES TABLE OUTLINE
(INSTRUCTIONS FOR COMPLETING FOLLOWING TABLE)

A separate table must be completed for each wastewater treatment facility (or wastewater management plan activity).

HEADING: Fill in the name of the Sewage Treatment Plant or Wastewater Treatment Facility (*Name of Facility*) being described within the Facility Table.

1. Indicate if the facility is existing or proposed.
2. Indicate NJPDES permit number. If the facility has been assigned a NJPDES number but the final permit is not yet issued, indicate the NJPDES number as pending. If a NJPDES number has not yet been assigned, leave blank.
3. Indicate whether discharge to ground water (dgw) or discharge to surface water (dsw) or both if applicable.
4. Fill in name of receiving water or aquifer.
5. Fill in the surface or ground water classification of the receiving water or aquifer according to the Surface Water Quality Standards (N.J.A.C. 7:9B) or Ground Water Quality Standards (N.J.A.C. 7:9-6).
6. Fill in the facility owner's name.
7. Fill in the facility operator's name.
8. If the facility has a Co-Permittee, fill in the Co-Permittee's name. Otherwise indicate as not applicable (*n/a*).
9. Fill in the physical location of the facility including municipality, county, street address and lot/block location.
10. Fill in the facility's discharge location using longitude and latitude (*i.e. degrees, minutes, seconds*) or in State Plane Coordinates.
11. Fill in the facility's present permitted flow or permit condition flow in million gallons per day. If the wastewater discharge is to ground water, provide the projected daily maximum flow. If the facility does not have a final NJPDES permit, leave the column blank.

For item numbers 12 and 13, use the Wastewater Flow Calculation Worksheet and Projected Flow Criteria Tables attached to the Water Quality Management Plan Amendment and Revision Pre-Application Form.

12. Calculate the existing and projected population to be served by the facility. Indicate the current year within the first set of parentheses next to "Present" and specify what year the ultimate buildout projection is for within the next set of parentheses next to "Ultimate Buildout Population Served". If the treatment facility lies within the WMP planning area EVERY MUNICIPALITY SERVED by it must be addressed. (*For treatment facilities located outside of the WMP planning area, only the served population within the WMP planning area needs to be addressed.*) If the facility serves a population that experiences a major seasonal fluctuation (*such as shore areas*), indicate both the average population and the seasonal high population. Fill in the names of the served municipalities on the centered blank lines on the table. If the treatment facility serves only a specific function, such as a school, only the existing and projected student population of the school must be shown. If the treatment facility serves a commercial establishment, provide the total maximum building occupancy and square footage. If the treatment facility serves an industrial facility with a domestic wastewater component (sanitary waste from employees), the number of employees served should be indicated.
13. Calculate the existing and projected wastewater flow presently received or projected including major seasonal fluctuations. Indicate the current year within the first set of parentheses next to "Present Wastewater Flow" and specify what year the ultimate buildout projection is for within the next set of parentheses next to "Ultimate Buildout

Wastewater Flow". If the treatment facility lies within the WMP planning area EVERY MUNICIPALITY SERVED by it must be addressed. (*For treatment facilities located outside of the WMP planning area, only the flows arising within the WMP planning area need to be addressed*). Fill in the names of the served municipalities on the centered blank lines on the table. If the facility treats wastewater from an area which experiences a major seasonal fluctuation (*such as shore areas*), indicate both the average annual wastewater flow and the seasonal high average wastewater flow.

Present flow: *Present* flows to the treatment facility should be determined using metered data. The most recent twelve-month period of data should be utilized. (Unless extreme conditions such as drought have caused significant deviation from normal flows.)

Infiltration/Inflow (I/I): Existing I/I should be identified. However, additional future I/I may not be projected. (The NJPDES Treatment Works Approval projected flow criteria make numerical allowances for I/I.) The existing I/I can be carried-over and accounted for in the total future wastewater flow.

Future flow: The average domestic flow from new development, exclusive of industrial flows, for facilities proposing to utilize conventional septic systems shall be calculated utilizing the design wastewater flow criteria contained in N.J.A.C. 7:9A-7.4 (*Standards for Individual Subsurface Sewage Disposal Systems*) with the following two exceptions which should use N.J.A.C. 7:14A-23.3 (*NJPDES Treatment Works Approval regulations*): office/retail space (0.1 gpd/square foot) and restaurants (including washrooms and turnover of 35 gallons/day/seat). However, an applicant may use either the N.J.A.C. 7:9A-7.4 design criteria, or N.J.A.C. 7:14A-23.3 projected flow criteria for facilities proposing to utilize advanced wastewater treatment prior to subsurface disposal as appropriate. In instances where future specific residential dwelling types are unknown, the residential flow calculation shall be computed using 75 gallons per capita per day. Future industrial flows should be estimated and a rationale provided.

DOMESTIC OR INDUSTRIAL TREATMENT FACILITIES TABLE FORMAT OUTLINE

(Name of Facility)			
1.	Existing or proposed facility: _____		
2.	New Jersey Pollutant Discharge Elimination System Permit Number: NJ _____		
3.	Discharge to ground water (dgw) or surface water (dsw): _____		
4.	Receiving water or aquifer: _____		
5.	Classification of receiving water or aquifer: _____		
6.	Owner of facility: _____		
7.	Operator of facility: _____		
8.	Co-Permittee of facility (where applicable): _____		
9.	Location of facility:		
	a. Municipality & County	_____	
	b. Street address	_____	
	c. Block(s) and Lot(s)	_____	
10.	Location of discharge (i.e. degrees, minutes, seconds):		
	a. Longitude	b. Latitude	_____
	or c. State Plane Coordinates _____		
11.	Present permitted flow or permit condition or daily maximum: _____		
12.	Summary of population served/to be served including major seasonal fluctuations:		
	Present ()	Ultimate Buildout ()	
	<u>Population Served*:</u>	<u>Population Served*:</u>	
	Municipality		
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____
	Total	_____	_____
	* Square footage for commercial development		
13.	Summary of wastewater flow received/to be received expressed in million gallons per day (mgd) and as a <u>30-day average flow</u> for dsw or a <u>daily maximum flow</u> for dgw:		
	Present ()	Ultimate Buildout ()	
	<u>Wastewater Flow (mgd)</u>	<u>Wastewater Flow (mgd)</u>	
	Municipality		
	_____	_____	_____
	Residential flow	_____	_____
	Commercial flow	_____	_____
	Industrial flow	_____	_____
	Infiltration/Inflow	_____	_____
	Total	_____	_____
	_____	_____	_____
	Residential flow	_____	_____
	Commercial flow	_____	_____
	Industrial flow	_____	_____
	Infiltration/Inflow	_____	_____
	Total	_____	_____
	_____	_____	_____
	Residential flow	_____	_____
	Commercial flow	_____	_____
	Industrial flow	_____	_____
	Infiltration/Inflow	_____	_____
	Total	_____	_____
	Total	_____	_____

N.J.A.C. 7:14A - 23.3 Projected Flow Criteria: The values specified below are to be used in computing the projected flow to wastewater conveyance and treatment facilities. The specific measurement unit listed for each category must be used as the basis for the projected flow. No additional provisions for inflow and infiltration are required. Flow for facilities that have combined uses must be determined by the summation of all appropriate projected flow values for each use. In the event that a facility is not covered by the table below, the applicant must propose the projected flow based upon operation of similar facilities.

Type of Establishment	Measurement Unit	Gallons Per Day	Type of Establishment	Measurement Unit	Gallons Per Day
Residential Dwellings (single family home, duplex units, townhouses, condominiums, apartments)			Institutions (includes staff)		
1 bedroom unit	Per Dwelling	150	Hospitals	Bed	175
2 bedroom unit	Per Dwelling	225	Other institutions	Bed	125
3 bedroom unit or larger	Per Dwelling	300	Schools (includes staff)		
Transit dwelling units			No shower or cafeteria	Student	10
Hotels	Bedroom	75	With cafeteria	Student	15
Lodging houses and tourist homes	Bedroom	60	With cafeteria and showers	Student	20
Motels and tourist cabins	Bedroom	60	With cafeteria, showers and laboratories	Student	25
Boarding houses			Boarding	Student	75
(max. permitted occupancy)	Boarder	50	Automobile service stations		
Camps			Service bays	per bay	50
Campground/mobile rec. vehicle/tent	Site	100	Filling position	per filling position	125
Parked mobile trailer site	Site	200	Mini-market	Sq. Ft.	0.100
Children's camps	Bed	50	Miscellaneous		
Labor camps	Bed	40	Office buildings (gross area)	Sq. Ft.	0.100
Day camps--no meals	Person	15	Stores and shopping centers (gross area)	Sq. Ft.	0.100
Restaurants (including washrooms and turnover)			Factories/warehouses (add process water)	Employee	25
Average restaurant	Seat	35	with showers, (add process water)	Employee	40
Bar/cocktail lounges	Seat	20	Laundromats	Machine	580
Fast food restaurant	Seat	15	Bowling alleys	Alley	200
24 hour service restaurant	Seat	50	Picnic Parks (restrooms only)	Person	10
Curb service/drive-in restaurant	Car space	50	Picnic Parks with showers	Person	15
Clubs			Fairgrounds (based upon average attendance)	Person	5
Residential	Member	75	Assembly halls	Seat	3
Nonresidential	Member	35	Airports (based on passenger use)	Passenger	3
Racquet club	court per hour	80	Churches (worship area only)	Seat	3
Bathhouse with shower	Person	25	Theater (indoor)	Seat	3
Bathhouse without shower	Person	10	Dinner theater	Seat	20
			Catering/Banquet Hall	Person	20
			Sports stadium	Seat	3
			Visitor Center	Visitor	5

PROJECTED FLOW CRITERIA

SOURCE: N.J.A.C. 7:9A-7.4, STANDARDS FOR INDIVIDUAL SUBSURFACE DISPOSAL SYSTEMS

Type of Establishment	Measurement Units	Gallons per day	Type of Establishment	Measurement Units	Gallons per day
Residential Dwellings (single family homes, Duplex units, townhouses, condominiums, Apartments)			Restaurant		
First bedroom	Per dwelling	200	sanitary waste only	Per patron	5
Each additional bedroom	Per dwelling	150	with kitchen wastes, add	Per patron	5
Minimum volume	Per dwelling	350	Clubs		
Minimum volume	Per apartment	350	Bathhouse, with showers	Per person	25
Minimum volume deed restricted senior citizen community or mobile home park	Per dwelling unit (< 5001 ft2) .	200	Bathhouse, without showers	Per person	10
Transit dwelling units			Beach dub	Per person	25
Boarding house, meals ⁽²⁾	Per guest	75	Country club		
non-resident	Per guest	15	Member	Per person	60
Dormitory, bunkhouse	Per bed	40	Non-member	Per person	25
Hotel	Per room	130	Institutional facilities		
Motel	Per room	130	Hospital, medical	Per bed	250
Rooming house, no meals	Per bed	65	Hospital, mental	Per bed	150
Cottages ⁽²⁾	Per person	100	Institution, other than hospital '	Per bed	150
Minimum volume	Per dwelling unit	350	Nursing/rest home	Per bed	150
Camps			Prison	Per inmate	150
Cottage, barracks type	Per person	65	Schools		
Day, no meals	Per person	20	Boarding	Per student	100
Resort ⁽²⁾	Per site	100	Day		
Trailer ⁽²⁾	Per site	100	No cafeteria or showers	Per student	10
with toilets, add	Per person	10	Cafeteria only	Per student	15
Restaurants			Cafeteria and showers	Per student	20
Bar	Per patron	5	Cafeteria, showers and laboratories	Per student	25
Cafeteria	Per patron	5			
Cocktail lounge	Per patron	5			
Coffee shop	Per patron	5			

Type of Establishment	Measurement Units	Gallons per day
Miscellaneous		
Airport	Per passenger	5
Assembly hall	Per seat	3
Auto service station	Per car	10
Beauty parlors and salons	Per sink	120
Bowling alley, no food	Per lane	125
with food, add	Per patron	5
Bus stop rest area	Per passenger	5
Church	Per seat	3
Comfort station/Picnic grounds		
with toilets	Per person	10
with toilets and showers	Per Person	15
Dining hall	Per customer	5
Factory/Industrial building ⁽¹⁾	Per employee, 8-hr	15
with showers, add ⁽¹⁾	Per employee, 8-hr	15
Laundry, self service	Per wash	50
Office building	Per employee, 8-hr	15
(whichever is greater) ⁽¹⁾	Per square foot	0.125
Shopping center ⁽¹⁾	Per square foot	0.125
Stadium	Per seat	3
store ⁽¹⁾	Per square foot	0.125
Swimming Pool	Per person	10
Theater, Indoor	Per seat	3
Theater, outdoor	Per parking space	10
Visitor Center	Per visitor	5

(1) Volume of sanitary sewage for employees included within method of estimation indicated.

(2) If laundry wastes are anticipated, increase the estimated flow by 50 percent.

CONTACTS FOR OBTAINING ADDITIONAL INFORMATION

Highlands Council

The Highlands Council is located at 100 North Road (Route 513), Chester, New Jersey 07930 and their phone number is (908) 879-6737.

Pinelands Commission

Refer to their website at <http://www.state.nj.us/pinelands/lcm.htm> or call (609) 894-7300 for information concerning the Pinelands.

New Jersey Meadowlands Commission

Refer to their website at <http://njmeadowlands.gov/> or call (201) 460-1700 for information on the Hackensack Meadowlands.

Coastal Area Facility Review Act (CAFRA)

Refer to the Department's Land Use Regulation Program's website at <http://www.nj.gov/dep/landuse/coast.html> or contact the Department's Bureau of Coastal Regulation at (609) 522-2289 for information concerning CAFRA.

Threatened & Endangered Species Habitat

Contact Larry Niles of the Department's Fish and Wildlife Endangered & Nongame Species Program at (609) 292-9400.

Freshwater & Estuarine Wetlands

USFWS National Wetlands Inventory Maps are available from the Department's Bureau of Maps and Publications located at 428 East State Street, Trenton, N.J. They may be contacted at (609) 777-1038. In addition, the State has more detailed wetlands mapping which was prepared by the Land Use Regulation Program. The wetlands maps represent a planning guide. For regulatory purposes field verification is required, as the wetlands lines are not regulatory boundaries. For information about the wetlands maps prepared by the Land Use Regulation Program, contact Robert Cubberley at (609) 633-6755. Copies of the state wetlands maps (aka quarter quads) are also available from the Bureau of Maps and Publications Office listed above.

Flood Prone Areas

For delineations done under the Flood Hazard Area Control Act contact the County Engineer to determine if the particular area is affected.

Maps prepared by the Federal Emergency Management Agency (FEMA) are available from the FEMA Map Distribution Center in Baltimore, Maryland by calling 1 (800) 358-9616. Delivery takes 3-6 weeks and there is a charge of \$5.00 for 1-10 panels and \$0.60 for each additional panel.

In addition, freshwater wetlands and flood prone areas mapping is also available on Geographic Information System (GIS). CD-ROMs containing this information are available from the Bureau of Maps and Publications Office at the address and phone number specified above. This information can also be downloaded from the NJDEP Geographic Information Systems web site located at <http://www.state.nj.us/dep/gis>. For information about the GIS mapping contact the Bureau of Geographic Information and Analysis at (609) 984-2243.

Public Open Space & Recreation Areas

For areas of 10 or more acres administered by the NJDEP, US Department of Interior, Palisades Interstate Park Commission, the county, or municipality: contact the respective agency. The Green Acres/Recreation Program may be contacted at (609) 984-0500 for information regarding Federal, State, and County administered areas.

Wild and Scenic Rivers

Contact Celeste Tracy or Valerie Salice of the Office of Natural Lands Management at (609) 984-1173.

Conservation Easements

For conservation easement information, contact the county(ies) or municipality(ies) where the activity(ies) is taking place. For Preserved Farmland information contact the local County Agricultural Development Board.